

# radiant heating

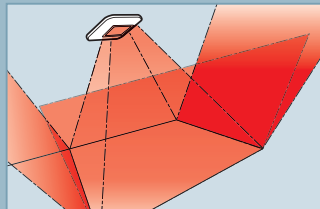
## What's the benefit?

- **Heats like the sun**  
Radiant heat passes through the air and heats solid objects making it highly efficient wherever it's installed.
- **Instant heat**  
No need for expensive pre-heating, these heaters give heat instantly, cutting the cost of heating intermittently used buildings.
- **Low running costs**  
Because only the intended occupants are heated, not the air around them, you only pay for the heat you really need, rather than a whole building or area.
- **Silent running**  
With no moving parts, the Dimplex heaters are silent when operating, making them perfect where noise would otherwise be a problem.
- **Low capital cost**  
By only heating chosen areas, capital costs can be reduced with fewer heaters when compared with other systems sized to heat whole buildings.

## How does radiant heating work?



In contrast to fan based heating, radiant heaters use the oldest form of heating known to man. Just as the sun's rays heat the earth, so our radiant heaters use this same method of heating objects (the earth, people, buildings etc) rather than the air between them for effective performance.



These radiant heaters transmit infra-red energy which is converted into heat when it is absorbed by objects which in turn then begins to warm the surrounding areas as surface temperatures rise.



Because the energy is only turned into heat as it comes into contact with solid objects, this heating technology can be used either indoors where building insulation would normally be a problem, or outdoors where localised people heating is desired. In this instance the heat provided is highly efficient as very little is lost into the atmosphere, unlike other methods of heating.

## The range

There are four types of radiant heaters in the Dimplex range.

### Ruby sleeved halogen element



Designed to offer a warm red glow, these short wave length elements operate at 2,200°C to provide a directional zone of heat.

### Gold finish halogen element



These gold coated elements work at similar temperatures to the ruby sleeved elements but also boast a gold finish that improves energy transmission by up to 15%.

### Infra-red element



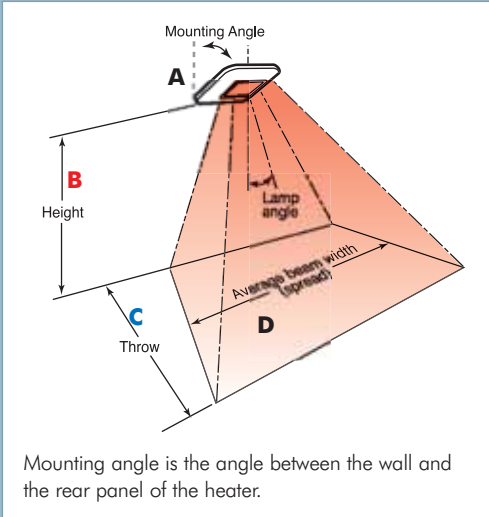
These medium wave length infra-red elements operate at 1000°C and provide an ideal combination of fast heat output and effective performance.

### Ceramic



These ceramic encased aluminium elements operate over a longer wavelength at up to 700°C to provide a softer heat without the glow experienced with the ruby and gold element types.

# Throw



## QXD Spread & Throw Charts

Height <b>B</b>	QXD1500		QXD3000		QXD4500	
	Throw <b>C</b>	Spread <b>D</b>	Throw <b>C</b>	Spread <b>D</b>	Throw <b>C</b>	Spread <b>D</b>
2.1m	2.5m	2.5m				
2.5m	3.4m	3.7m	4.2m	4.0m		
3.0m	4.5m	5.2m	5.0m	4.5m	5.0m	5.0m
3.5m			5.7m	5.7m	6.0m	6.1m
4.0m			6.4m	6.2m	7.1m	6.9m
4.5m					8.2m	7.8m

**A** All figures are for 45° mounting angle (for 30° mounting angle increase throw by 1.75 x)  
 120 W/m<sup>2</sup>  
 95 W/m<sup>2</sup>  
 70 W/m<sup>2</sup>

## Applications

- Inactive (churches/meeting rooms)
- Light work (workshops/desk working/despatch areas)
- Heavy work (factories/loading bays/open air construction)

## Performance tips

- Heaters should be mounted either side of the heated area for optimum comfort and coverage. (see positioning guide below)
- Heaters mounted outside must be rated at least to IPX4 rating.

## CXD Spread & Throw Charts

Height <b>B</b>	CXD2000H		CXD2000V	
	Throw <b>C</b>	Spread <b>D</b>	Throw <b>C</b>	Spread <b>D</b>
1.8m	1.8m	1.3m	1.6m	1.1m
2.0m	2.0m	1.4m	1.8m	1.3m
2.3m	2.2m	1.6m	1.9m	1.4m
2.5m	2.4m	1.8m	2.1m	1.6m
2.7m	2.5m	1.9m	2.3m	1.7m

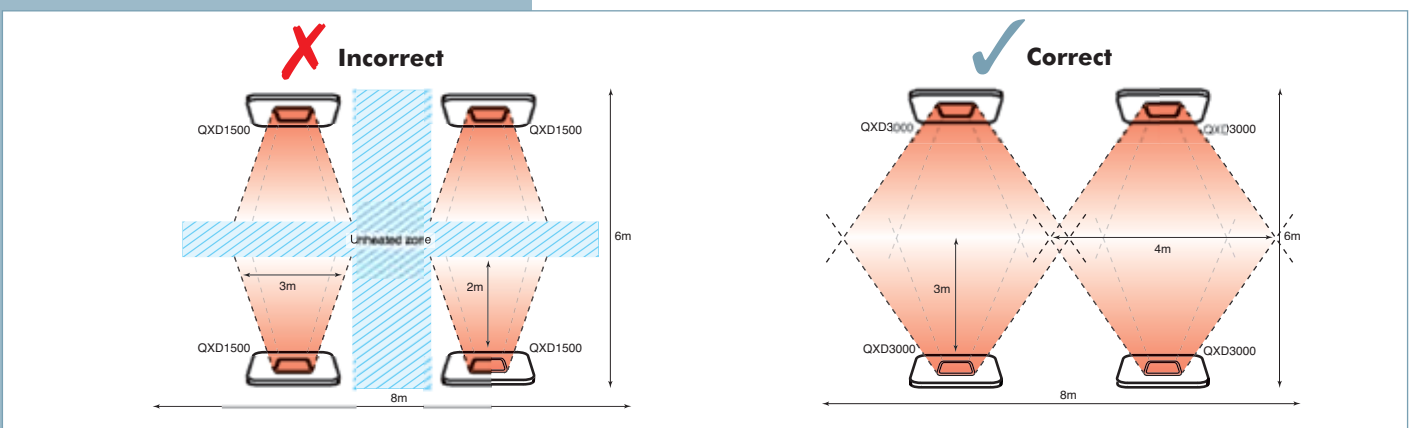
**A** All figures are for 45° mounting angle  
 80 W/m<sup>2</sup>  
 65 W/m<sup>2</sup>  
 50 W/m<sup>2</sup>

## Optional passive infra-red detector switch

- Compatible with Quartz heating up to 3kW output.
- Automatically switches the heater on or off, depending on whether the area below the heater is occupied.
- Time delay adjustment.
- Full 180° coverage over 15m if required.
- Size of detection area can be reduced.
- IP54 rated.
- Model DX4130.



## Positioning



Heaters installed from both sides ensure even heating as illustrated above